

CLAIMS:

1. A tip for a power dental flossing device, comprising:
a base portion for supporting the tip when coupled to the dental flossing device;
5 a central portion having a substantially rectangular cross-section, and having a first end and a second end, said first end coupled to said base portion, wherein said central portion has a height and a width;
an end portion coupled to said second end of said central portion, for insertion between a pair of adjacent teeth of a user, wherein said end portion has a height and a
10 width; and
a whitening compound substantially enclosing said end portion.
2. The tip of claim 1, wherein the whitening compound contains abrasive particles.
15
3. The tip of claim 2, wherein the whitening compound reacts with saliva.
4. The tip of claim 3, wherein the whitening compound dissolves upon contact with saliva.
20
5. The tip of claim 3, wherein the whitening compound foams upon contact with saliva.
6. The tip of claim 1, wherein the whitening compound comprises:

a flavoring agent; and
an abrasive particulate.

7. The tip of claim 1, wherein the whitening compound comprises:
5 a whitening agent; and
a polymer; wherein
the whitening agent is chemically bonded to the polymer; and
the polymer is chemically bonded to the tip.
- 10 8. The tip of claim 7, wherein the whitening agent is a chemical whitening agent.
9. The tip of claim 7, wherein the whitening agent is an abrasive whitening agent.
- 15 10. An apparatus for manufacturing a flosser tip, comprising:
a feed hopper sized to contain at least one flosser tip;
a spiral track operatively connected to the feed hopper, the spiral track
operative to align the at least one flosser tip;
a conveyor operatively connected to the spiral track, the conveyor transporting
20 the at least one flosser tip;
a vat operatively connected to the conveyor, the vat containing a whitening
compound, the vat operative to receive at least a portion of the at least one flosser tip
into the whitening compound to form at least one whitening flosser tip; and

a drying tunnel operatively connected to the vat, the drying tunnel operative to dry the whitening compound on the at least one whitening flosser tip.

11. The apparatus of claim 10, further comprising a packaging apparatus, the
5 packaging apparatus comprising:

a cartridge container sized to contain at least one cartridge;

a shuttle operatively connected to the cartridge container, the shuttle operative to move a cartridge from the cartridge container to a packaging arm;

a first packaging conveyor operatively connected to the drying tunnel, the first
10 packaging conveyor operative to move the at least one whitening flosser tip to the packaging arm; wherein

the packaging arm is operative to place the at least one whitening flosser tip into the cartridge.

15 12. The apparatus of claim 11, wherein the hopper vibrates to impart motion to the at least one flosser tip, thereby moving the at least one flosser tip out of the hopper and onto the spiral track.

13. The apparatus of claim 12, wherein the spiral track vibrates to align the at least
20 one flosser tip.

14. The apparatus of claim 14, further comprising a robotic arm operatively connected to the vat and conveyor, the robotic arm operative to lower the at least one flosser tip at least partially into the whitening compound.

15. The apparatus of claim 14, wherein the robotic arm may move vertically and rotationally.

5 16. A whitening flosser tip, comprising:
a flosser tip; and
a whitening compound bonded to the flosser tip, the whitening compound comprising:

10 a drying retardant agent;
an acrylic prepolymer;
a wetting agent; and
an abrasive agent.

17. The whitening flosser tip of claim 16, wherein the whitening compound
15 further comprises:

a flavoring;
calcium carbonate;
a white filler; and
a thickener.

20

18. The whitening flosser tip of claim 17, wherein the abrasive is sylodent 700.

19. The whitening flosser tip of claim 17, wherein the whitening compound further comprises a chemical whitener.

20. The whitening flosser tip of claim 19, wherein the whitening compound further comprises an anti-microbial solution.

5